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ABSTRACT

The University of Idaho's video outreach graduate program is described. The program is designed to provide continuing education, credit courses, and graduate degree-granting programs anywhere in the state by producing these programs on video cassette and Betamax formats. Presently the Master of Engineering in electrical and Mechanical Engineering and the Master of Science in Computer Science are available. Courses consisting of a minimum of 30 semester hours of classes are provided, and the regular requirements and policies of the graduate school of the university apply to the video outreach graduate programs. Upon completion of coursework, each student comes to the campus to take a comprehensive final oral and/or written examination, which is supervised by the student's graduate committee. The courses offered are taught each semester on campus and are videotaped for off-campus students. The video courses are complemented with instructor visitations, study guide materials of the classroom lectures, and by a toll-free telephone line. In addition, 13 video resource educational centers have been developed in 13 public libraries within the state. Off-campus student advising and counseling is available, and after admission to graduate school, students are assigned a graduate committee and an advisor from their academic department. On-campus administrators and faculty are involved in planning, maintaining, teaching, and evaluating all video outreach courses. Attention is directed to: program admission and registration procedures, student responsibilities, program graduate requirements and procedures, program fee structure, program enrollment trends, and program operating costs. A brochure on the program is appended. (SW)

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VIDEO OUTREACH

GRADUATE PROGRAM

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PROGRAM OVERVIEW

The University of Idaho with the assistance of the Kellogg Foundation has developed a program to provide educational opportunities to the people in Idaho through the medium of videotape. The program is designed to provide continuing education, credit courses, and graduate degree granting programs anywhere in the State by producing these programs on 3/4" U-matic color video cassette and on a 1/2" Betamax or VHS color cassette formats.

Presently the Master of Engineering in Electrical and Mechanical Engineering plus the Master of Science in Computer Science are available. As the demand warrants other masters degree programs which can be completed entirely through the Video Outreach Program may be implemented. Courses consisting of a minimum of 30 semester hours of classes are provided to meet the needs and objectives of the students. The regular procedures, requirements, and policies of the Graduate School at the University of Idaho apply to the Video Outreach graduate programs. Off-campus students are admitted to graduate school in the same manner as on-campus students. Students are urged to apply for admission to graduate school as soon as possible to alleviate petitioning previously taken courses for acceptance to their graduate program.

The program of each off-campus student is supervised by an on-campus graduate committee consisting of a chairman or advisor and at least two additional members. Upon completion of the coursework, each student comes to the campus to take a comprehensive final oral and/or written examination. The examination is supervised by the student's graduate committee.

The courses offered are those taught each semester on campus and are videotaped for off-campus students. The video courses are complemented with instructor visitations, study guide materials of the classroom lectures, and by toll free WATS telephone line for questions.

At this point the video program is oriented toward graduate degrees for individuals specializing in computers, circuit and systems, control systems and communications, power systems, materials and applied mechanics, and thermal science. In addition there are a number of courses available in the area of Civil Engineering and other engineering and related areas. Growth of the program in the future will be into additional disciplines and state-of-the-art techniques.

In addition the University of Idaho, through the Kellogg Foundation Grant, has developed thirteen video resource educational centers in the thirteen public libraries geographically distributed in the six regions within the State of Idaho Library System. A variety of video taped programs are produced by the University or are obtained from external sources and are made available to the library video resource educational centers for distribution to the public. These video tapes may be viewed in the library or may be checked out from the library and taken home to be viewed on home viewing equipment if such are available. Also the libraries are authorized to view these tapes as a public service over their local community cable systems.

Some of the video taped programs may be taken for University credit, others may be taken for professional development or personal pleasure. Individuals who wish to take video programs for credit must register with the University of Idaho and pay the normal video course registration fee.

The University has two modern, fully equipped, and completely operational video studio classrooms. The studios are equipped with up-to-date modern equipment and have the capability of producing professional television formats.

The Kellogg Foundation three year grant of $243,305 plus generous private industrial contributions of over $100,000 have made possible the development of an excellent video educational facility for the State of Idaho which is second to none in the Pacific Northwest and is the envy of a number of institutions.

The facility has the capability of various special effects, such as "split-screen", "keyed-in" graphics, inserts, pattern wipes, and character generations. In addition, a computer graphics terminal and keyboard is incorporated in the facility which can interact with an outside computer. This allows data from the computer to be video recorded along with other lecture material. Color 35 mm slides are reproduced with a 4th dedicated chain film camera. Slide changes can be initiated from the instructor's console or by the video operator and can be automatically inserted on the video tape. Certain laboratory demonstrations, experiments, and field studies can be made by a 5th portable camera and can be inserted and edited at any point of the presentation. These and numerous other capabilities and services are now available.

PROGRAM ADMINISTRATIVE PROCEDURES AND STUDENT ADVISING

The University of Idaho Video Outreach Program offers educational opportunities in engineering to people in industry, government, and to private citizens. Live regular courses offered on-campus are videotaped and are made available to off-campus students.

Individuals may enroll as non-matriculated students and earn regular university credit, or may apply for admission to graduate school and earn credit toward a master's degree. Subsequent transfer of non-matriculated credit earned to a degree program may be accomplished through a university petiton.

As the tapes are produced, they are shipped to a designated coordinator or an on-site tutor at the remote locations. The tapes are viewed at the convenience of the student and may be kept for a period of two weeks. At the end of the viewing period, the on-site coordinator or tutor is responsible for returning the tapes to the University of Idaho campus. Present policy is to return tapes within two weeks of their receipt at the remote locations. Users who retain the tapes beyond the authorized deadline are charged a late tape fee.

All administrative matters relating to the Video Outreach Program, including registration, registration changes, fee payments, refunds, extensions, and withdrawals are handled in writing through the Division of Engineering Education Outreach at the University of Idaho.

At each remote location an educational coordinator or an on-site tutor handles the mechanical details of the program, including videotape playback operation, videotape distribution, class scheduling, and monitoring of examinations. The selection of courses to be offered off-campus is based on demand by off-campus students and on the availability of these courses on-campus.

Off-campus student advising and counseling is available through the Division of Engineering Education Outreach to help students with questions concerning admis-

sion requirements, registration, course prerequisites, program planning, and with other educational concerns. After admission to Graduate School, students are assigned a graduate committee and an advisor from their academic department. In addition instructors are available to advise students and to answer questions using the in-state toll free telephone line. Also instructors may visit remote locations with 5 or more students to assist students when such assistance is requested. Furthermore the Director of Engineering Education Outreach Division makes site visits at the start of each semester to advise students, assist them with registration, and to answer questions about the program.

PROGRAM QUALITY CONTROL

The Video Outreach Program is integral to the educational mission of the institution and is characterized by the same quality of planning and instruction as found in regular on-campus programs.

The program is designed to meet a variety of adult educational needs including professional development, advanced education, technical career change or advancement and liberal and cultural education.

Since the program is an integral part of the institution; the institution maintains responsibility for all aspects of this program in the same manner that responsibility is required and maintained for regular on-campus programs.

Credit and non-credit courses maintain the same quality of planning and instruction which is maintained for regular on-campus courses.

The purpose of the Video Outreach Program is consonant with the stated purpose and objectives of the institution, and consistent with the institutions' ability to provide the necessary level of instruction, and quality control.

On-campus administrators and faculty are involved in planning, maintaining, teaching, and evaluating all video outreach courses. The faculty have competence in the field in which they teach and have appropriate academic degrees and/or experience. Student counseling consistent with the needs and special characteristics of part-time students is provided to meet the academic needs of such students.

All conditions governing the Video Outreach Program are fully disclosed in catalogs, brochures, announcements, and other promotional materials. This information includes fees, refund policies, admission procedures, program standards, and requirements to complete the course, program or degree. Learning resources, library facilities, classrooms, study areas, offices, plus other equipment and facilities are adequate to support the courses offered. Adequate financial re-

sources are committed to support the program. The Video Outreach Program is administered under appropriate institutional policies and procedures. The program reports through a clearly defined organization to an appropriate administrator.

The video courses which are offered off-campus are the same courses which are offered on-campus. These courses are taught by regular faculty on campus and are simultaneously videotaped and shipped to off-campus locations. The video courses carry regular University of Idaho residence credit and may be used towards a degree program at the University or may be transferred to another institution if such institution wishes to accept University of Idaho credit.

In addition to the videotapes, the off-campus students receive the same study guides and homework assignments as the on-campus students and take the same examinations. Examinations are proctored by on-site monitors and are returned to the campus where they are graded and evaluated by the faculty. The video courses are evaluated and graded using the same evaluation methods and standards as those used on campus.

A toll free telephore line is used for the students to contact the faculty on campus for assistance and the instructors make frequent on-site visitations to assist and counsel students. Also, the Director of the program, who is a professor of engineering at the University of Idaho, visits the student each semester to provide student counseling, advising, and course registration assistance.

PROGRAM ADMISSION AND REGISTRATION PROCEDURES

Official registration is scheduled the week before the beginning of classes. Classes follow the normal University of Idaho academic calendar. To register in a course, students must complete a University of Idaho, "Application for Admission" form and an "Official Registration" form and return these to the Engineering Education Outreach Division within two weeks of the scheduled registration period. Registration materials and information may be obtained from authorized University of Idaho registration centers throughout the state of Idaho, or from the Engineering Education Outreach Division.

Also, arrangements are made to have the Director of the Video Outreach Program conduct "blanket" registration by appointment in a place of employment, or in a public library prior to the start of each semester.

Registration fees are set by the State Board of Education for the University of Idaho. Audit or zero-credit registrants must pay full fees. Full payment of fees must accompany the registration material; otherwise, the registration is not complete and may be canceled without further notice. A late registration fee of $50 per student is charged to students who register after the second week of the course.

Registration fees are fully refunded if the course is cancelled for any reason by the University. Students who voluntarily withdraw from a course are entitled to refunds in accordance with the University policy on refunds.

Students may change their registration as provided in university regulations and in accordance with the regulations governing the on-campus resident students on "Registration Changes". Students registered in video courses are required to maintain "normal progress" toward the completion of that course. "Normal progress" in this case means that off-campus students must be no more than three weeks behind

the on-campus students. Students who do not maintain normal progress in a course are assigned a grade of Incomplete (I) at the end of the semester. Incompletes are removed in accordance with University of Idaho policy for "Removal of Incompletes".

STUDENT RESPONSIBILITIES AND GENERAL PROCEDURES

The videotapes are on loan to the students registered in the courses and must be returned to the Engineering Education Outreach Division at the University of Idaho within two weeks after they are sent to the student. All tapes are copyrighted by the University. Reproduction of all or any part of these tapes by any means is prohibited.

Tapes are shipped to properly registered students only once a week by United Parcel Service. Each tape is insured for $50. The shipping costs to the students are borne by the University.

It is the responsibility of the student or the user coordinator at each location to ship the tapes back to the University by the same shipping mode, to pay the returning costs and to insure each tape for $50 against shipping damages or losses.

Users who retain the tapes beyond the authorized deadline will be charged a late tape fee.

Students are responsible for purchasing textbooks required or recommended for each course.

University of Idaho Bookstore order forms for "Off-Campus Courses" are provided to each student during registration.

The Engineering Education Outreach Division provides information on textbook title, author's name, publisher, and price of book.

Supplementary material, home work assignments, and examinations are shipped, as appropriate, with each set of videotapes at no additional cost to the student.

The program requires that each group of users has a person who can assist with the viewing of the tapes, and who can act as a coordinator and/or a tutor. The tutor is a person who by reason of training, experience, and attainments is exceptionally qualified to assist with the video course in question. Such person

usually serves on a volunteer basis, unless otherwise specified. The tutor is responsible for designating the location and time of viewing of the tapes, distributing written materials and assignment information to the participants, collecting homework, monitoring examinations, and assisting with minor problems that students may have.

PROGRAM GRADUATE REQUIREMENTS AND PROCEDURES

Admission to the Video Outreach Program is open to any student who holds a B.S. degree in some field of Engineering, Mathematics, Physics, or equivalent and who presents a scholastic record indicating probable success in graduate work.

In addition to qualify for full graduate admission, candidates must fulfill the requirements of the Graduate School and have an overall grade point average of 3.00 or better on a 4.00 scale for previous academic work completed. Acceptance of students not having this minimum grade point average is possible, subject to recommendation and approval of the academic department involved. The academic department and the Graduate School give final approval for all admissions.

The Graduate Record Examination (GRE) is not a University of Idaho Graduate School requirement, but students are invited to provide the results of the examination, if available, when they apply for admission.

There are two master's degree options available to the Video Outreach Program students. A Master of Science which requires a thesis, and a Master of Engineering which does not require a thesis. In general off-campus students are strongly urged to take the non-thesis option.

Unless otherwise specified in a program description, all master's degree programs require a minimum of 30 credits in courses numbered 300 and above. Additional course work may be stipulated in individual cases to meet particular objectives or needs for additional background.

For the Master of Science degree, which requires a thesis, a minimum of 20 credits in courses and a maximum of 10 credits in 500 Master's Research and Thesis is required to fulfill the master's degree requirement. A more common practice however is to require 24 credits in course work and 6 credits in Master's Research and Thesis.

For the Master of Engineering, which does not require a thesis, a minimum of 30 credits in courses is required to fulfill the degree requirements.

In both cases stated above, of the minimum 30 credits required for the degree, at least 18 credits must be in 500 level courses. The remainder 12 credits may include 400 level courses in the major and 300 or 400 level courses in supporting areas provided these courses are not required for the B.S. degree in the student's major.

At least 18 of the minimum 30 credits required for a master's degree must be earned in University of Idaho courses. The number of credits earned in another graduate degree granting institution may not exceed 12 credits to be applied toward the minimum requirement of 30 credits and must be approved by the academic department.

PROGRAM FEE STRUCTURE

The individual student fee for the Video Outreach Program is $60 per credit hour per student plus a $2 taping fee per tape received by the student. An alternative fee structure may be used and this is the industrial fee structure.

The industrial fee is also $60 per credit hour per student plus a variable taping fee of $15, $10, or $5 per tape received by the company. The industrial taping fee is based on the size of the company, hence the variable structure. The industrial taping fee is paid by the company.

Students who wish to take courses for zero credit or for audit must pay the same fees.

Users who retain tapes beyond the authorized deadline are charged a $10 per week late charge.

PROGRAM ENROLLMENT PROFILE

The Video Outreach Program at the University of Idaho is enjoying a tremendous success. During its first years the program has experienced a phenomenal exponential growth rate.

In the fall semester 1976-77, the first semester of the program, three video courses were offered to three remote stations with a total student enrollment of 26 students.

In the spring semester 1976-77, eight video courses were offered to eleven remote stations with a total student enrollment of 95 students.

Presently the division videotapes an average of 40 three credit courses plus a number of special short courses each year. These courses are shipped to over 100 remote locations and the total enrollment has surpassed 400 students. To produce these credit courses requires 60 hours of videotaping per week per semester. This means that each of the two video production classrooms are used 30 hours per week for production, and each of the two video production operators are sitting at the operating console an equal amount of time per week, or 6 hours per day of actual production time. This schedule does not include the time required to produce special short courses.

At present the division ships tapes to 102 locations per week per semester. This constitutes an average of 306 tapes per week. The logistics involved in handling and processing these many tapes are horrendous. Therefore a permanent position for a full time videotape processing clerk has been established. This person is assisted with additional student help.

In June of 1979 the Association for Media-Based Continuing Education for Engineers, Inc., AMCEE, invited the University of Idaho to become a member institution. The University accepted AMCEE's invitation and became a full member of

that consortium. The AMCEE Consortium consists of 21 prestigious universities dedicated and actively engaged in recording and improving short courses, seminars, symposia, continuing education courses, as well as graduate courses, on convenient videotapes anywhere in the world.

The Program has met and has surpassed its objectives and performance indicators to date.

PROGRAM OPERATING COST ANALYSIS

At the present level of video course offering and enrollment of 400 students per year, and at an average fee of $260 per 3 credit course per student the division anticipated average annual income is $104,000.

The division presently has two production operators and one video mailing clerk on soft money. Therefore a budget of $38,000 per year from generated income is required to cover these salaries.

The present UPS and mailing cost rate for the division is $1,000 per month, or an average annual cost of $12,000.

The WATS line plus other long distance and local telephone rates average about $500 per month, or $6,000 per year.

Other division direct operating expenses such as office supplies, and faculty travel to visit students average about $6,000 per year.

Capital outlay expenses for the division to update and maintain equipment such as replacing video tubes for the cameras which cost about $1,000 each, and "heads" for the tape machines which cost about $300 each and other equipment and facilities amortization average about $12,000 per year.

Hence the total direct operating budget for the division which must be generated from income is on the order of $74,000 per year.

This leaves a balance of about $30,000 per year which is distributed to the academic departments generating the credit video courses to assist them with added video course teaching expenses.

University
of Idaho

TELECOMMUNICATIONS FACILITIES

University of Idaho
Moscow, Idaho 83843

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Several years ago the University of Idaho developed an innovative program to provide graduate, undergraduate, and continuing education to off-campus students through the medium of videotape. It was recognized at the time that the new program was but the first step in the evolution of a more comprehensive approach to the delivery of adult education to remote areas.

Recently the university ventured into the next phase of its technological educational delivery system. The university has now developed a multimedia telecommunications delivery system. The expanded system uses videotape, microwave, cable television, satellite, facsimile, and the telephone to provide graduate and professional education to the citizens in the State of Idaho.

The Video Outreach Program, which delivers courses via the medium of videotape, continues to receive positive and enthusiastic support. During recent semesters, the university has offered as many as 20 videotaped courses per semester to over 200 students in 33 cities and 100 shipping locations. Now, in addition to the videotaped courses, the university is using the recently completed microwave system between the University of Idaho and Washington State University to exchange graduate courses in a number of disciplines. A number of courses are being taught via the microwave system each semester and additional courses and other exchange programs between the institutions are planned for the future. This system is fully interactive with two-way video and two-way audio.

Also in addition to the microwave system between the University of Idaho and Washington State University, the university is taking advantage of the statewide microwave network to teach interactive television courses between Boise State University and the University of Idaho.

In addition to these various Outreach activities, the university has been working towards the development of a campus-wide cable television network. In January 1982, this network became operational on campus. Now there are six channels broadcasting programs daily from 7:30 am to 9:30 pm. The cable network interconnects 28 campus buildings with over 100 outlets serving all the colleges and most of the major departments on campus. This network can receive and rebroadcast national programs received through the satellite, or through the commercial and the PBS networks, or broadcast programs which are originated on campus. The cable network has been received with enthusiasm and is already getting heavy use by all departments on campus.

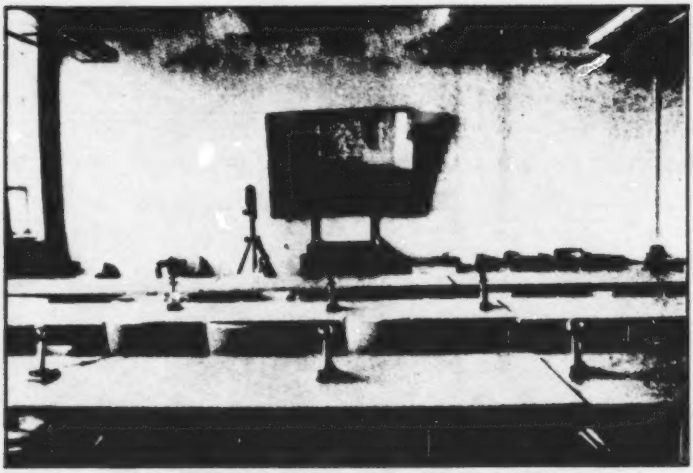
The video educational facility is designed to produce 3/4" color videocassettes or 1/2" Betamax or 1/2" VHS format for such educational activities as:

1. Continuing education courses
2. Credit or non-credit courses
3. Seminars and conferences
4. Special topics and programs
5. Programmed learning systems
6. Effective teaching aids
7. Special training aids

The videotaping media brings the campus to the students. It opens up new educational dimensions relative to distance and time.

Regularly-scheduled on-campus courses are conducted in the video classroom in a manner such that not only lectures and demonstrations, but all student questions and class discussions are recorded on videotape for the off-campus students. Completed videotapes, along with class materials, course assignments, and examinations are delivered to off-campus students by commercial delivery service. Off-campus students are enrolled as regular students of the University of Idaho and receive regular credit for courses. Participating industries and government agencies provide playback equipment, tutors, classroom facilities and some administrative support for the program. Also, playback units are available in a number of libraries throughout the state for student use. The instructors of the videotaped courses may visit remote locations with five or more students to assist students when such assistance is required. Additional interaction between instructor and students occurs via telephone or student visitations to the campus.

The videotaping educational program has the additional advantage that minimum class constraints can be eliminated. Modular courses can be developed within a major discipline. Multi-disciplinary approaches to educational needs can be used.



The main facility consists of two studio classrooms with a control center between the two classrooms. The photographs on these pages show the general layout of the facility. Studio JEB-21 seats 18 students, and JEB-23 seats 35 students.

Each classroom is equipped with three color cameras, designated as instructor camera, line camera, and overhead camera.

The instructor and line cameras are located in the control center and view the stage end of the classroom.

The overhead camera is located in a small well in the ceiling directly over the instructor's console. It can view the writing pad, prepared graphics, class demonstrations, slides, and other activities performed at the console.

In addition, each classroom is equipped with two large-screen (25") color monitors on either side toward the front of the room. These permit the students in the class to view the on-going videotaping and material being viewed by the overhead camera. Each classroom is equipped with four microphones mounted overhead in the center of the room. These microphones pick up student questions, class discussions, and instructor's responses for transmission to the video recorders.

The instructor's console is designed to be a convenient teaching center. The console houses a transparency projector, control switches for the film camera, and zoom control for the overhead camera. The instructor is able to monitor on line video, overhead camera, and film camera.

The Control Center houses the control consoles for each classroom and other related electronic equipment. It contains a number of recording machines, a character generator, chain film equipment, switching equipment, audio control equipment, and various video and audio monitors and test equipment. One way glass windows are installed in the control center to give the operator a clear view of the classroom without causing distraction to the class.

The video output from the classroom is fed to the master Control Center for processing and switching to the video recording equipment. Recordings are made on 3/4" cassette, or 1/2" Betamax, or 1/2" VHS format which are compatible with any video playback machine presently on the market. Up to 16 master recordings can be made simultaneously in the control center.

FACILITY CAPABILITIES

The university has two modern, fully equipped, and competely operational video studio classrooms. The studios are equipped with up-to-date modern equipment and have the capability of producing professional television formats.

The Kellogg Foundation three year grant of $243,000 plus private industrial and other contributions of over $200,000 have made possible the development of an excellent video educational facility for the State of Idaho, which is second to none in the Pacific Northwest, and is the envy of a number of institutions.

The facility has the capability of various special effects, such as "split-screen," "keyed-in" graphics, inserts, pattern wipes, and character generations. In addition, a computer graphics terminal and keyboard is incorporated in the facility which can interact with an outside computer. This allows data from the computer to be video recorded along with other lecture material. Color 35 mm slides are reproduced with a 4th dedicated film camera. Slide changes can be initiated from the instructor's console, or by the video operator, and can be automatically inserted on the videotape. Certain laboratory demonstrations, experiments, and field studies can be made by a 5th portable camera and can be inserted and edited at any point of the presentation. These and numerous other capabilities and services are now available.

Recently the construction of a Receive-only Satellite Earth Station was completed. This system is now operational and will be used as part of the overall modern telecommunications educational delivery system, to extend the client base of present offerings, and to add to the present programs by offering state-of-the-art programs of interest to the community.

The university has negotiated an affiliates agreement with the Appalachian Community Service Network, ACSN, and the University of Idaho Video Outreach Program. This agreement authorizes the Video Outreach Program to receive and redistribute ACSN programs. Also the University of Idaho is a member institution of the 21 university consortium, the Association for Media-Based Continuing Education for Engineers, AMCEE. Membership to the consortium allows the university to exchange programs with the other member institutions.

A variety of program formats are available through ACSN which include graduate and undergraduate courses for credit, workshops and seminars, teleconferences, and general community service programs which are of direct interest to Idaho.

In order to receive the ACSN signal through the RCA SATCOM IIIR Satellite, a 15 foot receiving antenna plus a receiver near the existing video studio facility have been installed. The signal is fed directly to the Control Center and recorded on the existing video recorders. In addition, this signal may be viewed directly on closed circuit television.

Recently a new television link between the University of Idaho and Washington State University in Pullman, Washington was completed. The microwave system implemented consists of two full-time duplex channels. The system has the capability to provide two-way video and two-way audio signal and would permit two classes to be conducted simultaneously.

The Video Outreach Program has acquired two Sony 72" Color Video Projection Systems. These are ideal for viewing videotapes and other televised programs by large groups.

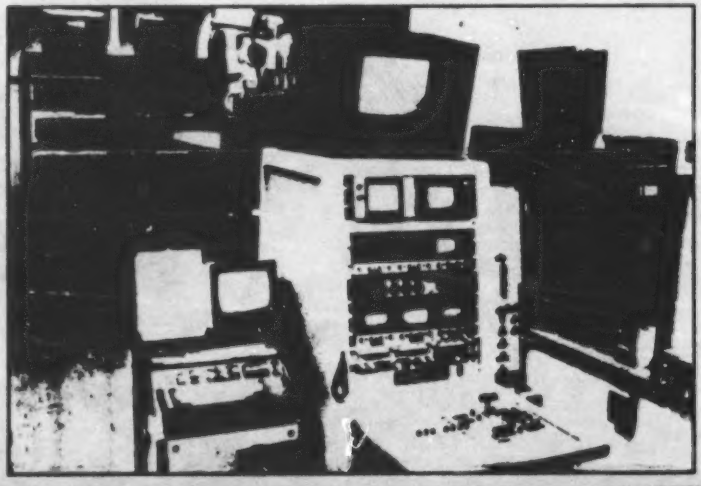
At present these are used primarily by students to view the Washington State University and Boise State University live microwave courses. However, they may also be used by large classes on-campus to view a variety of videotaped courses, telecourses, or teleconferences.

The Video Projection Systems are housed in the Janssen Engineering Building and may be used either in Room-26 which has a capacity of 50 seats, or in the amphitheater style Room JEB-104 which has a capacity of 300 seats.

Also the university has installed an automatic Qwip 2150 model facsimile transceiver by Exxon. This system can transmit and receive hard copy information and can communicate with any 2, 3, 4, or 6 minute facsimile unit anywhere there is a telephone. This system is used to send and receive hardcopy materials such as examinations, homework assignments, or other time critical information.

Remote Production Capability

A "Roving Camera" system is available to allow two camera recordings to be produced at any location with or without AC power. The equipment could be air, land or water borne. The value of the portable equipment can hardly be overestimated since it can be taken directly to the field or laboratory to help demonstrate a particular experiment or process. Videotapes produced in the field, are edited into finished productions with equipment located in the editing center. Studio cameras, titles, graphics, and "voice over" sound tracks may be added during this process.



EDUCATIONAL DELIVERY SYSTEMS

- Main Systems
  1. Videotape System
  2. Microwave System
  3. Satellite System
- Supporting Systems
  1. WATS Telephone System
  2. Facsimile System
  3. Interactive Video

VIDEO OUTREACH PROGRAM

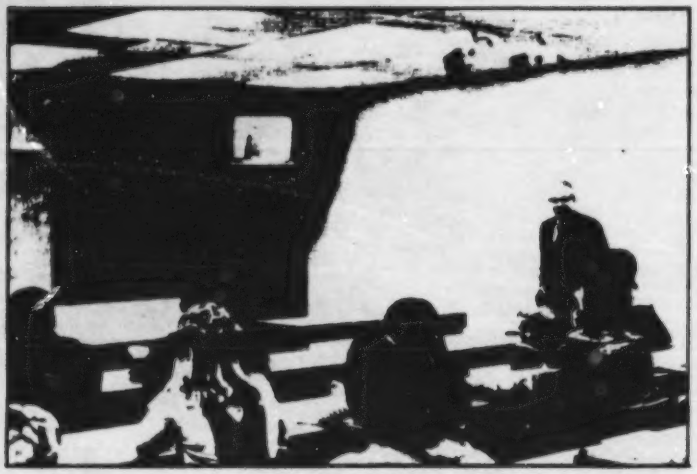
The program is designed to provide graduate, undergraduate, and continuing education courses anywhere by producing these courses on color videocassettes. Some of the videotaped programs may be taken for university credit, others may be taken for professional development or personal enrichment. Individuals who wish to take video courses for credit must register with the University of Idaho and pay the normal video course registration fee.

Type of Courses

Potentially, any class taught at the University of Idaho may be presented on videotape. In addition, the video facilities may be used to present special courses, programs, and training-type tapes. The idea behind the entire project is to provide service to the State of Idaho, its agencies, and its people by making a wide variety of educational opportunities available at virtually any location and at a reasonable cost to the users.

Special advantages realized through videotaping of courses are:

1. Videotaping allows complete freedom of course scheduling at industrial locations on a delayed but none-the-less regular schedule.
2. Videotapes may be retained and delay viewed by those individuals who would otherwise miss a class because of illness, travel or job obligations.
3. Students both on-campus and off-campus may use the tapes to review lectures.
4. Courses may be presented to locations beyond the bounds of reasonable closed-circuit TV systems and at considerably lower cost.
5. Videotapes may be viewed by faculty interested in self-evaluation and potential improvement of classroom presentation techniques.



In addition to the graduate and undergraduate videotaped courses offered for academic credit, the University of Idaho has also available a number of video short courses. These are professional development topical programs and are designed with the specific needs of the practitioners in mind.

Student fees, rental fees, or purchase prices are set separately for each of these courses. The fees for all these courses are based on three completely independent pricing methods. A person may select the option of paying an individual fee, or an industrial rental fee, or a purchase price for the complete course.

Continuing Education Units (CEU) credit through the university is available for all of these courses. The CEU is defined as an organized continuing education experience under responsible sponsorship, capable direction and qualified instruction. The CEU is a nationally recognized measure of professional development which may be useful to career advancement.

The Video Outreach Program has been reviewed and approved by the Northwest Association of Schools and Colleges, and the program is now formally included in the accredited status of the University of Idaho.

Presently the Master of Engineering in Electrical Engineering and Mechanical Engineering, plus the Master of Science in Computer Science are available. As the demand warrants other degree programs which can be completed entirely through the Video Outreach Program may be implemented. Courses consisting of a minimum of 30 semester hours of classes are provided to meet the needs and objectives of the students. The regular procedures, requirements, and policies of the Graduate School at the University of Idaho apply to the Video Outreach graduate programs. Off-campus students are admitted to graduate school in the same manner as on-campus students.

Delivery Methods for Videotapes

An efficient delivery system is used to move the videotapes and to minimize the lag time between the on-campus and off-campus students. The off-campus students are generally two weeks behind the on-campus students.

Shipping Methods: There are three acceptable commercial shipping methods that may be used. These are listed in order of preference: 1) United Parcel Service (UPS), 2) U.S. Postal Service - first class mail, or 3) Other comparable commercial delivery systems, such as the Greyhouse Bus Service.

Shipping Costs: The shipping costs for the videotapes are shared between the university and the users. The shipping costs are borne by the university and the returning costs are borne by the users. In addition, the university pays for the shipping associated with class materials, and the user pays the shipping costs for the textbooks.

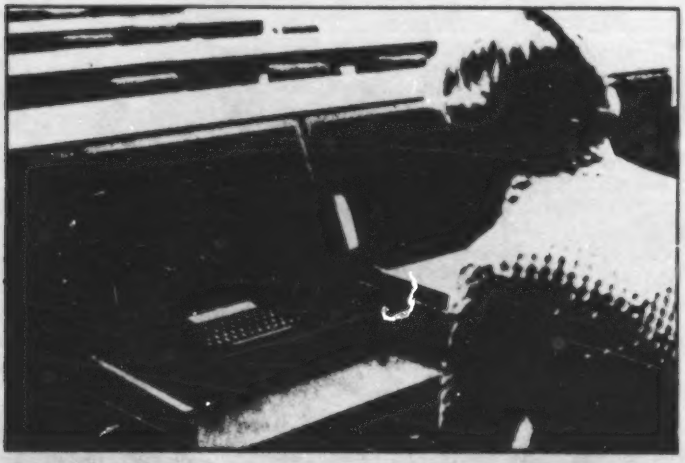
The time lapse between sending the receiving of tapes should be kept to a minimum. Normally tapes are shipped to the users once a week in a package of three tapes. These tapes are kept by the users for approximately two weeks before returning them to the university. During this time the tapes may be viewed by the users as many times as desirable.

VIDEO OUTREACH PROGRAM REGISTRATION PROCEDURES

Official registration is scheduled the week before the beginning of classes. Classes follow the normal University of Idaho academic calendar on a fall and spring semester schedule.

To register in a course, students must complete a University of Idaho, "Application for Admission" form and an "Official Registration" form and return these to the Engineering Education Outreach Division within one week of the scheduled registration period.

Arrangements may be made to have the Director of Engineering Education Outreach Division conduct "blanket" registration by appointment in a place of employment. Also students may register by mail.



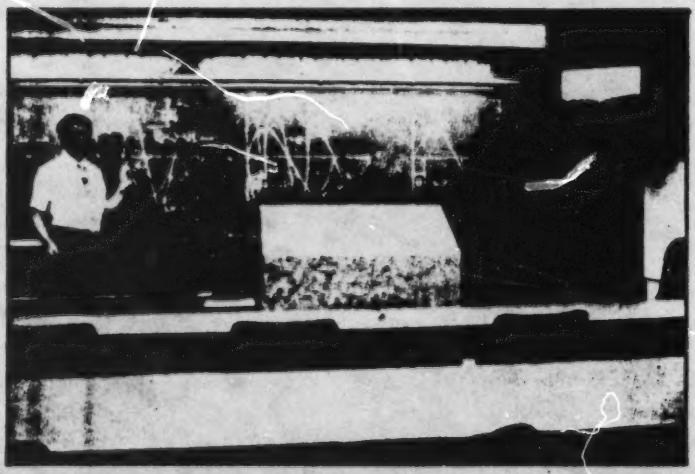
VIDEO OUTREACH PROGRAM FEES

Individual fees are $60 per credit hour per student, plus $160 taping fee per three credit course. Industrial fees are $60 per credit hour per student, plus $600 taping fee per three credit course. These fees are set by the Board of Regents and are subject to change. The individual or industrial video course taping fee must be paid by all who register in video courses. Normally this fee should be paid by the company. However, if the company is not willing to pay this taping fee, the individual must pay it in order to be officially registered in a video course. The individual taping fee does not imply that each student will receive his or her private set of tapes. If a student wishes to receive his or her private set of tapes, an additional $80 fee per three credit course will be charged for this service. Taping fee payments may be deferred until the end of the semester.

Videotape Longterm Rental Fee: An organization or an individual may wish to rent a single tape or to rent an entire course for an extended period of time. In such cases the normal rental charge is $50 per hour tape. For example a three credit course of 44 one hour tapes will rent for $2,200 for a period not to exceed six months.

Videotape Purchase Fee: An organization or an individual may wish to purchase a single tape or to purchase an entire course. In such cases the normal purchase price is $200 per hour tape in the United States, and $250 per hour tape for overseas. For example, a three credit course of 44 tapes will sell for $8,800 in the United States, and $11,000 overseas.

In all these cases appropriate contracts are executed to protect the faculty and the university under copyright laws. In addition the faculty member whose video credit course is rented or purchased as a packaged course by a company or other agency receives 50% of the rental or purchase fee collected from such transaction. It is understood that in all cases author privileges and copyrights are retained by the author and the University of Idaho in accordance with the established policy as stated in "The Policy Governing Rights and Responsibilities in Video Instruction at the University of Idaho."



USER'S VIEWING REQUIREMENTS

The aim of the Video Outreach Program is to provide course work to professional employees of the state's industries, to governmental agencies, and to the citizens of the state regardless of geographic location and number of participants per location.

Viewing Facility

Users are required to provide appropriate facilities for viewing the tapes and administrative support for the program. A company conference room or meeting room with comfortable seating arrangements should be satisfactory. A chalkboard to be used during class discussions, and provision for darkening the room are necessary.

Type of Equipment

Users are required to provide playback equipment for the viewing of tapes. Most users buy their own playback units. There are numerous manufacturers that make recorders, playback machines, and TV monitors, though SONY Corporation, Japan Victor Corporation (JVC), Setchell Carlson, Magnavox, Zenith and RCA may be some of the most common manufacturers of such equipment.

The following playback viewing station equipment are recommended:

1. One videocassette 3/4" U-matic player, or 1/2" Betamax, or 1/2" VHS player.
2. One color television receiver
3. One mobile support table

Playback equipment as described above may also be rented from some suppliers.

Educational Coordinators or Tutors

It is strongly recommended that for each group of users there be a person who can assist with the viewing of the tapes, and who can act as a coordinator and/or a tutor for the examinations. The tutor shall be a person who by reason of training, experience, and attainments is exceptionally qualified to assist with the video course in question. Such person usually serves on a volunteer basis, unless otherwise specified. The tutor is responsible for designating the location and time of viewing of the tapes, for distributing written materials and assignment information to the participants, for collecting homework, for monitoring examinations, and for assisting with minor problems that students may have.

For additional information contact:

University of Idaho

Anthony L. Rigas, Director
Engineering Education Outreach Division
Moscow, Idaho 83843

Phone: (208) 885-6373 or call Toll Free
Within the State of Idaho 1-800-632-8590